REHABILITATION OF THE BLIND

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HOUSE FOR THE BLIND

were frequently deficient. Physical examination disclosed a large number of uncorrected defects.

On the other hand, a large number of the employees who had taken no sick leave had a long period of service at the Bureau and were receiving fairly high salaries. They generally held responsible positions in the organization. Their efficiency ratings were of uniformly high level. Included in this group were many unmarried older women whose domestic responsibilities were negligible. On the basis of their medical history and the findings of their physical examination the employees in this group were generally in good health and tended to observe good health habits.

Conclusion

A STUDY of 100 government female office workers who took excessive sick leave during a six-month period and a control group of 100 who took no sick leave during the same period of time revealed important and interesting socioeconomic and medical differences between the two groups.

Rehabilitation of the Blind

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THERE has been more written in medical literature and less accomplished in regard to the study of adapting physically handicapped persons to industrial work than almost any other subject. The great majority of physically handicapped employees have been grateful for the opportunity to perform remunerative work. In many instances it presents the first gainful employment they have had in many years. This holds true, especially, with the blind, who in the past were completely eliminated from industry.

In the manufacturing of Timken tapered roller bearings it is essential that the diameter of the various parts for anti-friction bearings be ground to within very fine dimensions of the specified sizes. All parts of the bearings are checked in the final inspection department, where the operators use precision gauges with electrical or mechanical dial type indicators which show highly amplified readings of any variations in the diameter of the piece being checked to the point which can be measured to one twenty-five millionth (.000025) of an inch, which is equivalent to one-eightieth the diameter of the human hair.

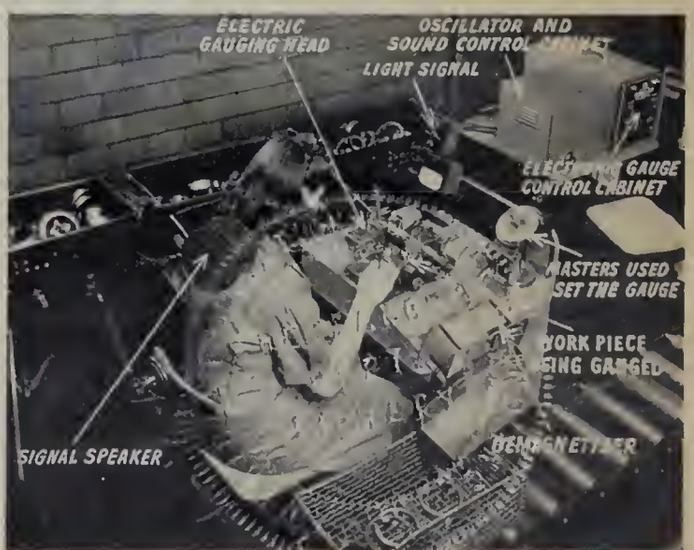
Those parts falling over and under the specified size limit are detected and removed by means of an electronic device. To enable a blind operator to complete this very fine inspection with the same accuracy as a seeing operator, who observes this type of inspection by a switch presenting three different colors —red for rejection, green for pass, and amber for re-inspection, the research department of The Timken Roller Bearing Company has invented a sound detector to be used on the same gauge. This sound detector is used with three different notes in a small cone-type speaker mounted on the back of the chair of the blind operator. A piece of work that is normal or within the limit of size, even to one twenty-five millionth (.000025) of an inch, is indicated by the middle note. A high note indicates oversize and a low note indicates undersize of the inspection work. These three notes are produced by a simple electronic oscillator controlled by relays connected to the indicator lights of the electronic gauging system used.

By means of this apparatus the research department has made it possible for the blind to see and complete inspection work within one twenty-five millionth (.000025) of an inch, by means of their ears. This apparatus is available to any industry that is willing to employ blind for the inspection of work down as close as one twenty-five millionth (.000025) of an inch, without any rights or royalties. But this can only be used for the occupation of the blind.

Sylvester Pfendler, blind employee of the Timken Roller Bearing Company, Canton, Ohio, gauges the outside diameter of roller bearing cups by means of the new electronic sound device developed by Timken engineers over a period of two years, while visiting Sergeant Robert McFarrin, former employee on furlough, looks on

In addition to this method of inspection developed by the research department, blind employees perform sound tests, which are the final inspection of the assembled bearings, for smooth and noiseless operation. This is purely a "hearing" check-up. File testing is another job accomplished by the blind, where each cup and cone is tested for hardness by use of a file. The blind operator differentiates by "feel" as to the hardness or softness of steel for rejection or pass.

It has been found that the blind employees can perform about 80% as efficient work as the regular employee, and the results observed are gratifying to those instrumental in the rehabilitation of the blind by developing new methods.



New precision sound gouging device developed by the Timken Roller Beoring Company, Canton, Ohio, for blind operotors

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Freedom of the Press

At the top of page 629 of this issue of Industrial Medicine there are the following words: "The editorial policy is to encourage frank discussion. On this basis contributions are invited. The editors will exercise care in checking on the accuracy of data printed, but in all other respects articles and opinions of which expression is allowed are the opinions of their authors—the editors reserving in all cases the right to comment on the same, in the current or any subsequent issues, as they may be inclined." Since January, 1936, these words have occupied the same position on the first reader page of every issue of this publication. They are not as detailed nor perhaps as emphatic as similar statements in some other publications, but we have heretofore felt that they were sufficiently comprehensive. Meanwhile, "time marches on," and the rapid and tremendous progress of industrial medicine is developing methods and techniques under circumstances which are sometimes rather strenuous and often, perhaps, temporarily responsive to the exigencies of wartime situations. Some of these things that are now in the making are prolific sources of differences of opinion, argument and controversy. In view of the fact that the phrase, "expression is allowed," has appeared for so many years in the above-mentioned statement of our editorial policy, we believe that such present-day conditions and our relation to them might be well served by some comment on what we mean by "allowed." The scope of our coverage of the field of industrial medicine involves publication of everything that pertains to that field. This embraces all we can learn of what men in the field are doing, what they are saying, and what they are thinking. It is inclusive of news, comment, opinion, controversy and criticism. In every kind of endeavor the appearance of controversy and criticism is indicative of life and growth; when these don't exist, the field has gone stale. And no publication that is itself alive to its field and growing in its usefulness will exclude any such evidences of life and growth from its columns. The term, "allowed," therefore, with regard to anything pertaining to our field which the editors think will be sufficiently interesting to our readers to warrant publication, does not mean that we shall fail or refuse to print it merely on the ground that it is critical or controversial. Our first and governing consideration is reader interest. That is as it should be, and "allowed" as we use it is merely a way of saying that the editors have complete and unhampered discretion. We realize, of course, that such a policy is, on occasion, likely to be misunderstood. For example, the advocates of one side of a controversial matter may feel inclined to a measure of satisfaction, or believe they have invoked official approval, from the fact of the publication of their view of the matter, while at the same time the advocates of the other side take umbrage at the idea that the publication is carrying the torch for their opponents. For that reason, among others—and particularly in view of certain controversies which we know are coming up for the edification of our readers in early issues—we take this occasion to say, with what we hope will be *permanent emphasis*, that the appearance of any article, or expression of opinion, or comment in Industrial Medicine does not mean that either the editors or the Associations for which Industrial Medicine is the official journal necessarily approve of the article or the point of view of the writer. Nor does such appearance in these columns indicate any sponsorship or official cognizance on the part of any of the Associations unless such sponsorship or official character is definitely and positively indicated. It is no function of a publication which purports to represent its field to take sides in any issues within the field. It is the part, however, of such a publication to cover the field, and that is what we are endeavoring to do. When, in the discretion of the editors, this requires the presentation of both sides of a controversy, both sides will be presented. And when—also in the discretion of the editors—it requires the exclusion of matters that ought not to be published here, such will be excluded. Meanwhile, the opinions of the editors and the things which are definitely sponsored by the magazine, and therefore by its Associations, are and will be confined to the editorial columns unless there is a specific statement of sponsorship elsewhere in the issue.

Passing the Buck

Among Fred Vinson's last official acts as Director of the Office of Mobilization and Reconversion was the submission to the President and Congress of his quarterly report dated June 30, 1945, and entitled, "The Road to Tokyo and Beyond." The report has 10 sections, one of which is devoted to food. The food section starts off, "The tight situation that we face today in food is attributable to four major factors," and the fourth of these "major factors" is as follows: "The United States ate too much in 1944 and the first half of 1945; at one time it appeared that surpluses of some foods might develop, hence allocations to consumers were increased beyond what subsequent production justified." In the first half of the sentence the

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